006260 "6h99Z960

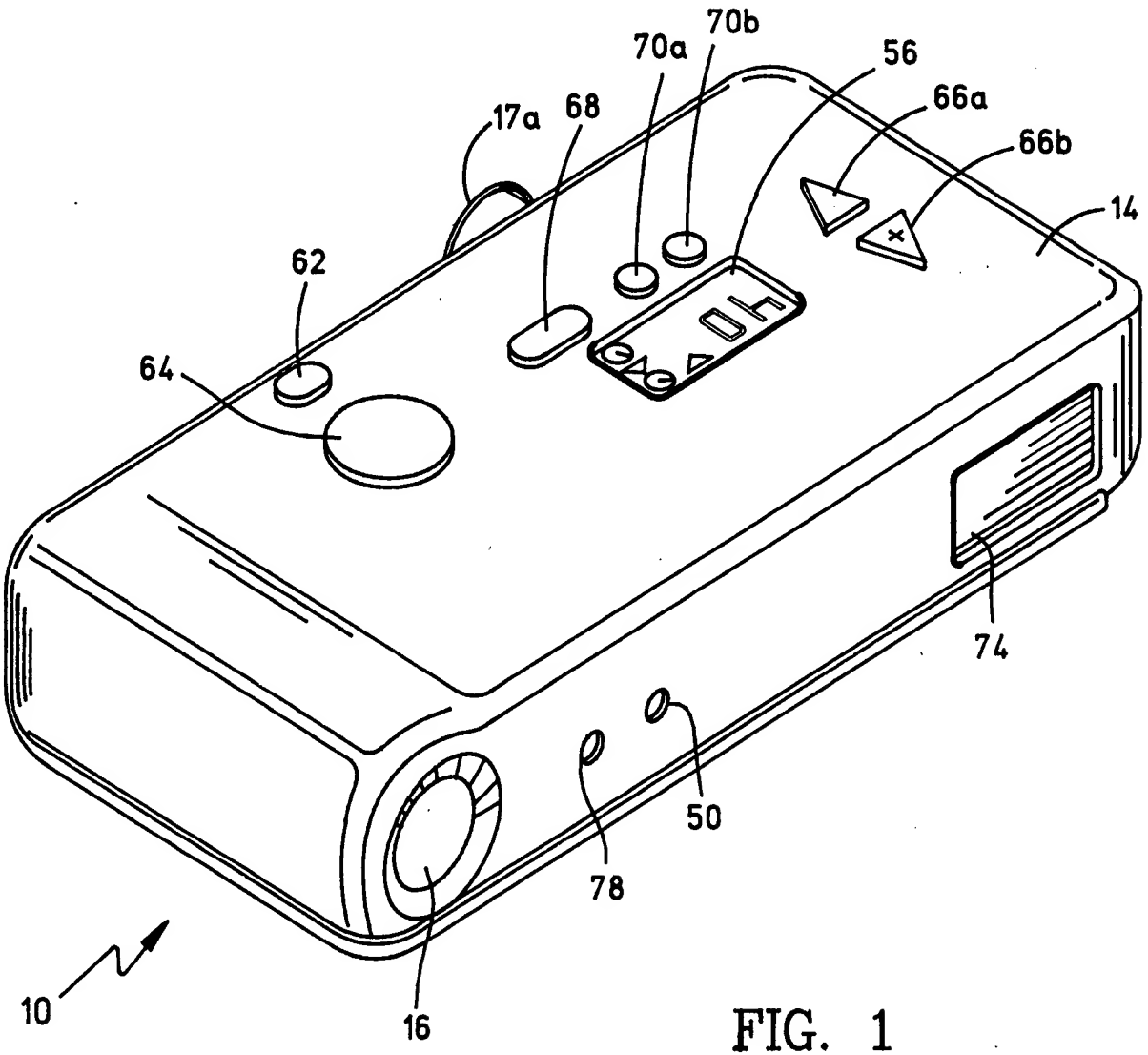

FIG. 1

006260 "EP99A960

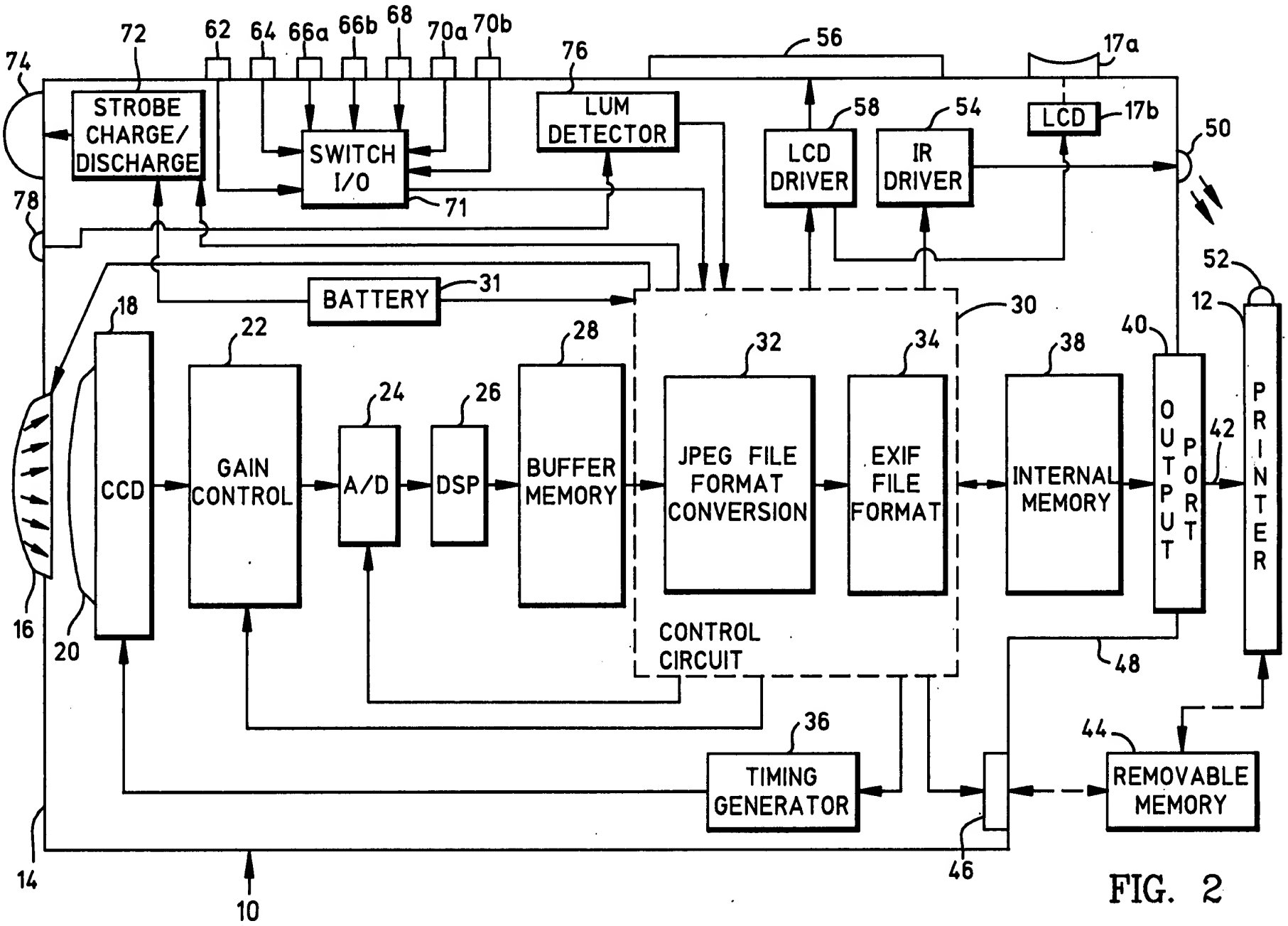

FIG. 2

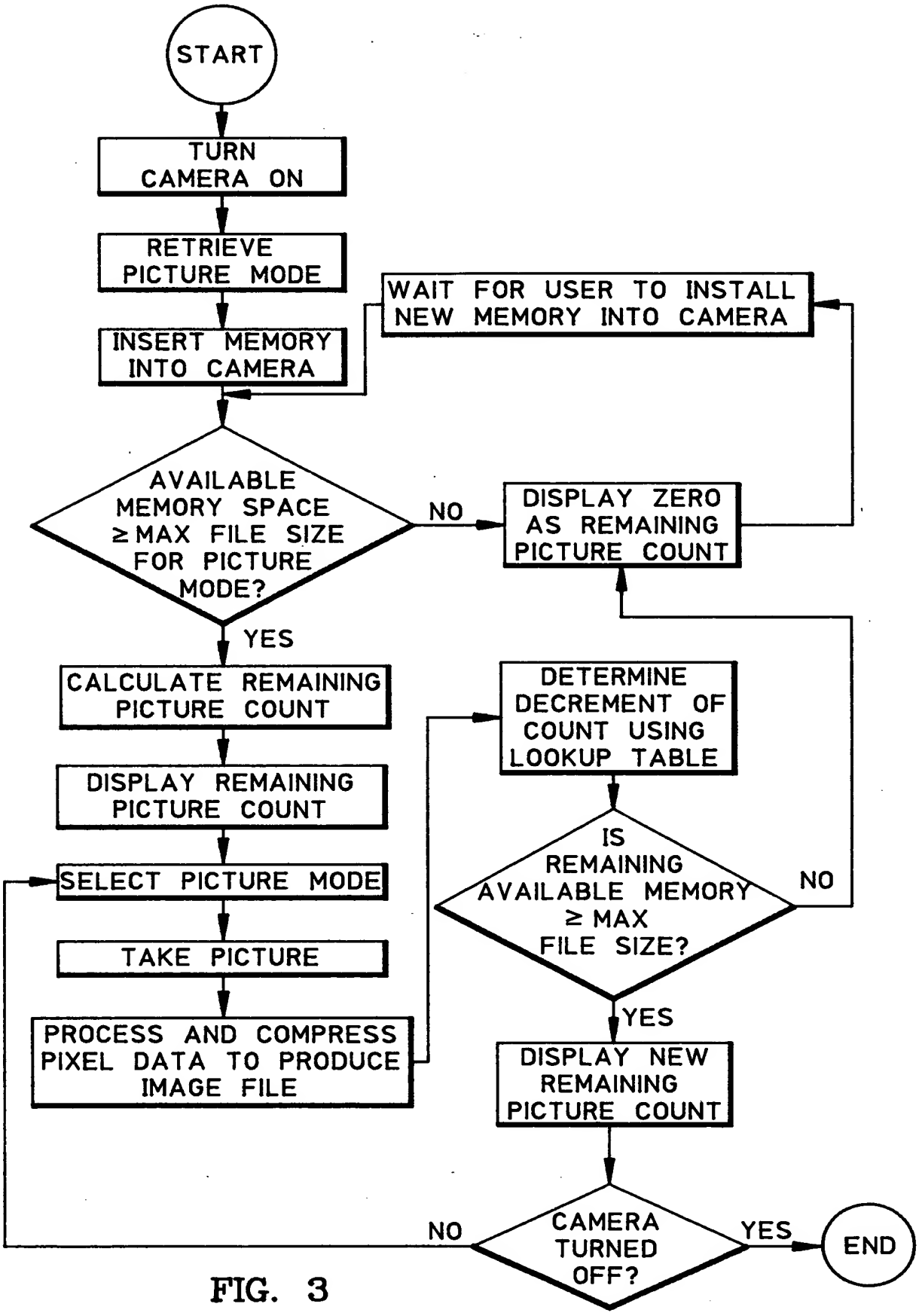
START
TURN CAMERA ON
RETRIEVE PICTURE MODE
INSERT MEMORY INTO CAMERA
WAIT FOR USER TO INSTALL NEW MEMORY INTO CAMERA
AVAILABLE MEMORY SPACE ≥ MAX FILE SIZE FOR PICTURE MODE?
NO
DISPLAY ZERO AS REMAINING PICTURE COUNT
YES
CALCULATE REMAINING PICTURE COUNT
DISPLAY REMAINING PICTURE COUNT
SELECT PICTURE MODE
TAKE PICTURE
PROCESS AND COMPRESS PIXEL DATA TO PRODUCE IMAGE FILE
DETERMINE DECREMENT OF COUNT USING LOOKUP TABLE
IS REMAINING AVAILABLE MEMORY ≥ MAX FILE SIZE?
NO
YES
DISPLAY NEW REMAINING PICTURE COUNT
CAMERA TURNED OFF?
NO
YES
END

FIG. 3

COMPRESSED IMAGE FILE SIZE	PICTURE COUNT DECREMENT	IMAGE FILE SIZE COMMENTS
100KB	0	MINIMUM
200KB	0	
300KB	0	
400KB	0	
500KB	1	
600KB	1	AVERAGE
700KB	1	
800KB	1	
900KB	2	
1000KB	2	
1100KB	2	
1200KB	2	
1300KB	3	
1400KB	3	MAXIMUM

FIG. 4

006260 6n39Z360

PICTURE COUNT	THREE DIAMOND MODE	TWO DIAMOND MODE	ONE DIAMOND MODE
1	MAX_{3D}	MAX_{2D}	MAX_{1D}
2	$MAX_{3D} + AVG_{3D}$	$MAX_{2D} + AVG_{2D}$	$MAX_{1D} + AVG_{1D}$
3	$MAX_{3D} + 2 \times AVG_{3D}$	$MAX_{2D} + 2 \times AVG_{2D}$	$MAX_{1D} + 2 \times AVG_{1D}$
4	$MAX_{3D} + 3 \times AVG_{3D}$	$MAX_{2D} + 3 \times AVG_{2D}$	$MAX_{1D} + 3 \times AVG_{1D}$
5	$MAX_{3D} + 4 \times AVG_{3D}$	$MAX_{2D} + 4 \times AVG_{2D}$	$MAX_{1D} + 4 \times AVG_{1D}$
6	$MAX_{3D} + 5 \times AVG_{3D}$	$MAX_{2D} + 5 \times AVG_{2D}$	$MAX_{1D} + 5 \times AVG_{1D}$
7	$MAX_{3D} + 6 \times AVG_{3D}$	$MAX_{2D} + 6 \times AVG_{2D}$	$MAX_{1D} + 6 \times AVG_{1D}$
8	$MAX_{3D} + 7 \times AVG_{3D}$	$MAX_{2D} + 7 \times AVG_{2D}$	$MAX_{1D} + 7 \times AVG_{1D}$
999	$MAX_{3D} + 998 \times AVG_{3D}$	$MAX_{2D} + 998 \times AVG_{2D}$	$MAX_{1D} + 998 \times AVG_{1D}$
N	$MAX_{3D} + (N-1) \times AVG_{3D}$	$MAX_{2D} + (N-1) \times AVG_{2D}$	$MAX_{1D} + (N-1) \times AVG_{1D}$

FIG. 5

MEMORY ADDRESS (HEX)	MEMORY ADDRESS (BINARY)	CF FREE SPACE
xxxx001H	xxxx 0000 0000 0001	MAX $_{3D}$
xxxx002H	xxxx 0000 0000 0010	MAX $_{3D}$ + AVG $_{3D}$
xxxx003H	xxxx 0000 0000 0011	MAX $_{3D}$ + 2 x AVG $_{3D}$
xxxx004H	xxxx 0000 0000 0100	MAX $_{3D}$ + 3 x AVG $_{3D}$
xxxx005H	xxxx 0000 0000 0101	MAX $_{3D}$ + 4 x AVG $_{3D}$
xxxx3E6H	xxxx 0011 1110 0110	MAX $_{3D}$ + 997 x AVG $_{3D}$
xxxx3E7H	xxxx 0011 1110 0111	MAX $_{3D}$ + 998 x AVG $_{3D}$
xxxx401H	xxxx 0100 0000 0001	MAX $_{2D}$
xxxx402H	xxxx 0100 0000 0010	MAX $_{2D}$ + AVG $_{2D}$
xxxx403H	xxxx 0100 0000 0011	MAX $_{2D}$ + 2 x AVG $_{2D}$
xxxx404H	xxxx 0100 0000 0100	MAX $_{2D}$ + 3 x AVG $_{2DX}$
xxxx405H	xxxx 0100 0000 0101	MAX $_{2D}$ + 4 x AVG $_{2D}$
xxxx7E6H	xxxx 0111 1110 0110	MAX $_{2D}$ + 997 x AVG $_{2D}$
xxxx7E7H	xxxx 0111 1110 0111	MAX $_{2D}$ + 998 x AVG $_{2D}$
xxxx801H	xxxx 1000 0000 0001	MAX $_{1D}$
xxxx802H	xxxx 1000 0000 0010	MAX $_{1D}$ + AVG $_{1D}$
xxxx803H	xxxx 1000 0000 0011	MAX $_{1D}$ + 2 x AVG $_{1D}$
xxxx804H	xxxx 1000 0000 0100	MAX $_{1D}$ + 3 x AVG $_{1D}$
xxxx805H	xxxx 1000 0000 0101	MAX $_{1D}$ + 4 x AVG $_{1D}$
xxxxBE6H	xxxx 1011 1110 0110	MAX $_{1D}$ + 997 x AVG $_{1D}$
xxxxBE7H	xxxx 1011 1110 0111	MAX $_{1D}$ + 998 x AVG $_{1D}$

FIG. 6

PICTURE MODE	MEMORY ADDRESS	CF FREE SPACE
ONE DIAMOND	xxxx	MAX_{1D}
ONE DIAMOND	xxxx + 1	$MAX_{1D} + AVG_{1D}$
ONE DIAMOND	xxxx + 2	$MAX_{1D} + 2 \times AVG_{1D}$
ONE DIAMOND	xxxx + 3	$MAX_{1D} + 3 \times AVG_{1D}$
• • • •		
ONE DIAMOND	xxxx + 3E7h	$MAX_{1D} + 998x \times AVG_{1D}$
TWO DIAMONDS	xxxx + 401h	MAX_{2D}
	xxxx + 402h	$MAX_{2D} + AVG_{2D}$

FIG. 7

PICTURE COUNT	CF FREE SPACE	INCREMENTS
1	MAX	
2	MAX + AVG	
3	MAX + 2 x AVG	
4	MAX + 3 x AVG	
• • • •		
20	MAX + 19 x AVG	
22	10 MB	2 MB
• • • •	12 MB	2 MB
	14 MB	2 MB
40	16 MB	4 MB
• • •	• • •	• • •
80	32 MB	8 MB
• • •	• • •	• • •
160	64 MB	16 MB
• • •	• • •	• • •
320	128 MB	32 MB
• • •	• • •	• • •
640	256 MB	64 MB
• • •	• • •	• • •
999	512 MB	128 MB
• • •	• • •	• • •
999	1024 MB	

FIG. 8

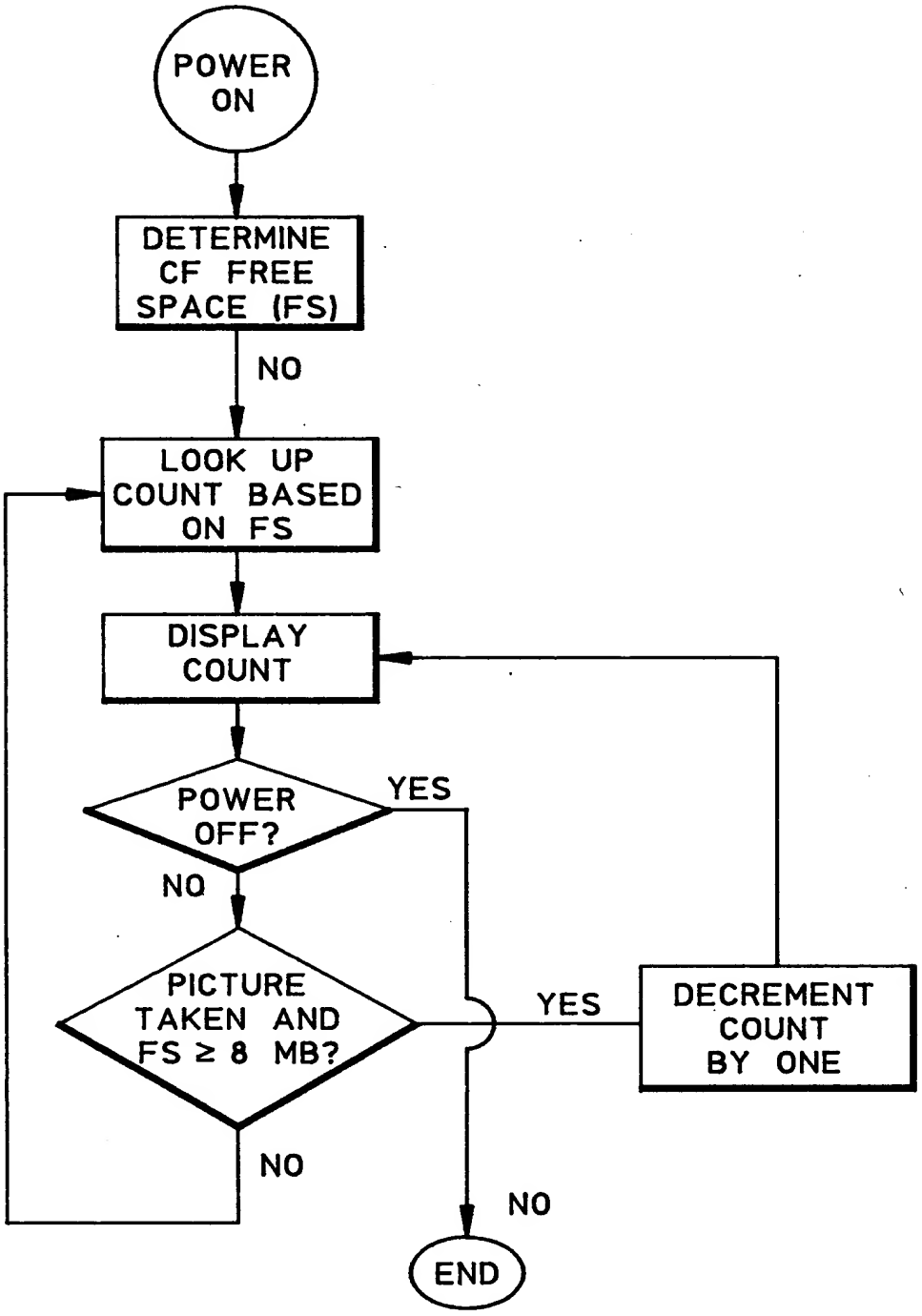
POWER ON
DETERMINE CF FREE SPACE (FS)
NO
LOOK UP COUNT BASED ON FS
DISPLAY COUNT
POWER OFF?
YES
NO
PICTURE TAKEN AND FS ≥ 8 MB?
YES
DECREMENT COUNT BY ONE
NO
NO
END

FIG. 9